

# Bunched arrowhead

## *Sagittaria fasciculata*



*Bunched arrowhead, USFWS*

**Status:** Endangered

**Description:** Bunched arrowhead is a small herbaceous plant (15 to 16 inches tall) that grows in saturated soils. It's the only *Sagittaria* species in the Southern Appalachians that does not have arrowhead-shaped leaves. Emergent leaves are broad and tapered at the tip and up to 12 inches long and one to two inches wide. The white flowers begin blooming in mid-May and continue through July. The fruits mature a few weeks after flowering.

**Habitat:** Undisturbed sites are typically located just below the origin of slow, clean, continuous seeps on gently sloping terrain in deciduous woodlands.

**Range:** Bunched arrowhead is known from one county in upstate South Carolina and another in southwest North Carolina.

**Listing:** Threatened, July 25, 1979. 44 FR 43700 43701

**Critical habitat:** None designated

**Threats:** The primary factor determining the rarity of bunched arrowhead is the current rarity of its required habitat. The seepage habitat in which bunched arrowhead occurs is extremely threatened, and remaining bunched arrowhead populations are threatened by residential and industrial development, conversion to pasture, and invasive exotic species.

**Why should we be concerned about the loss of species?** Extinction is a natural process that has been occurring since long before the appearance of humans. Normally, new species develop through a process known as speciation, at about the same rate other species become extinct. However, because of air and water pollution, forest clearing, loss of wetlands, and other man-induced environmental changes, extinctions are now occurring at a rate that far exceeds the speciation rate.

All living things are part of a complex and interconnected network. We depend on the diversity of plant and animal life for our recreation,

nourishment, many of our lifesaving medicines, and the ecological functions they provide. One-quarter of all the prescriptions written in the United States today contain chemicals that were originally discovered in plants and animals. Industry and agriculture are increasingly making use of wild plants, seeking out the remaining wild strain of many common crops, such as wheat and corn, to produce new hybrids that are more resistant to disease, pests, and marginal climatic conditions. Our food crops depend on insects and other animals for pollination.

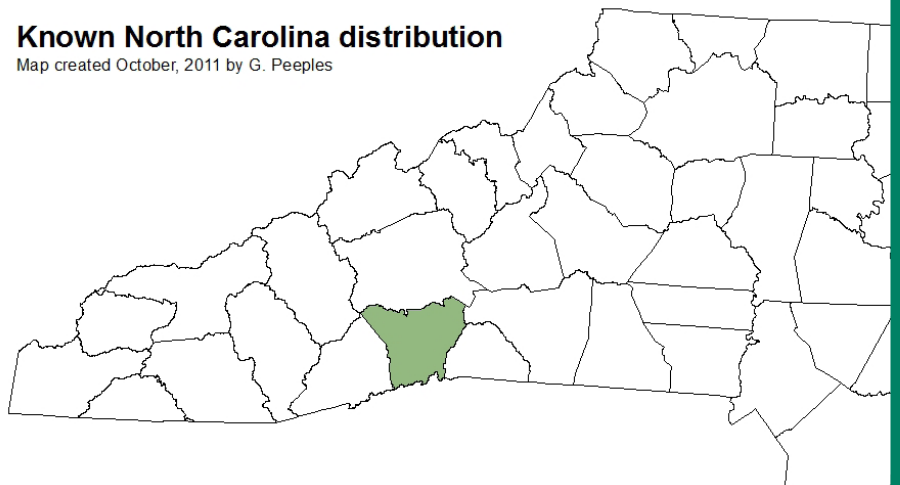
Healthy forests clean the air and provide oxygen for us to breathe. Wetlands clean water and help minimize the impacts of floods. These services are the foundation of life and depend on a diversity of plants and animals working in concert. Each time a species disappears, we lose not only those benefits we know it provided but other benefits that we have yet to realize.

### What you can do to help

Tread lightly and stay on designated trails.

### Known North Carolina distribution

Map created October, 2011 by G. Peebles



## U.S. Fish & Wildlife Service

Visit arboretums, botanical gardens, and parks and learn all you can about endangered plants and the causes of their declines.

Don't collect or buy plants collected from wild populations.

Participate in the protection of our remaining wild lands and the restoration of damaged ecosystems.

Support wetland protection efforts at local, state, and national levels.

Establish and maintain forested stream-side buffers. Several federal, state, and private programs are available to assist landowners, both technically and financially, with restoring and protecting stream-side buffers and eroding streams.

Implement and maintain measures for controlling erosion and storm water during and after land-clearing and disturbance activities. Excess soil in our streams from erosion is one of the greatest water pollution problems we have today.

Be careful with the use and disposal of fertilizers, pesticides, and other chemicals. Remember, what you put on your land or dump down the drain may eventually wind up in nearby water.

Support local, state and national clean water legislation.

Report illegal dumping activities, erosion, and sedimentation problems. These activities affect the quality of our water, for drinking, fishing, and swimming.

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